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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,894	10/17/2003	Yasuyoshi Suzuki	4041K-000160	9787
27572	7590	03/07/2006		
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER SHEEHAN, JOHN P	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 03/07/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/687,894

Applicant(s)

SUZUKI ET AL.

Examiner

John P. Sheehan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/03 06/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 to 5 and 8 to 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Moro et al. (Moro, US Patent No. 5,348,800).

Moro teaches a process that is encompassed by the instant claims (column 2, line 38 to column 3, line 55).

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 to 5 and 8 to 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuhiro et al. (Yasuhiro, Japanese Patent Document No. 5-36514, cited in the IDS submitted October 17, 2003) taken in view of the admitted known prior art disclosed in applicants' specification, page 2, lines 29 to 32.

Yasuhiro teaches a process that, with the exception of the sintering using a millimeter wave sintering apparatus or a discharge plasma sintering apparatus, is encompassed by the process recited in applicants' claims 1 to 3, 5, 8, 9 and 11 (see, the English language Abstract submitted with the IDS and applicants' specification, page 1, the second full paragraph). Yasuhiro also teaches that the soft magnetic powder has an average particle diameter of 2 to 50 microns (machine language translation, page 2, paragraph 0014) which overlaps the particle size recited in applicants' claims 4 and 10. In addition to the Fe-Si-Al alloy disclosed in Yasuhiro's Abstract, Yasuhiro teaches additional alloys that can be used in Yasuhiro's process (page 2, paragraph 0013) that are encompassed by applicants' claims 5 and 11.

The admitted known prior art disclosed on page 2, lines 29 to 32 of applicants' specification teaches that sintering using a millimeter wave sintering apparatus or a discharge plasma sintering apparatus are known.

Yasuhiro and the claimed process differ in that Yasuhiro does not teach sintering using a millimeter wave sintering apparatus or a discharge plasma sintering apparatus.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Yasuhiro's disclosure does not limit the sintering process that can be used in Yasuhiro's process, therefore Yasuhiro is considered to encompass the use of any known sintering process including sintering using a millimeter wave sintering apparatus or a discharge plasma sintering apparatus which as acknowledged by applicants' are known. On pages 4 and 5 of applicants' specification it is disclosed that sintering using a millimeter wave sintering apparatus or a discharge plasma sintering apparatus improves the properties of the soft magnetic product. However, there is no evidence to support applicants' statement. "It is well settled that unexpected results must be established by factual evidence. Mere argument or conclusory statements in the specification do not suffice." *In re Deblauwe*, 222 USPQ 191, 196 (Fed. Cir. 1984). Mere lawyer's arguments and conclusory statements in the specification, unsupported by objective evidence, are insufficient to establish unexpected results." *In re Wood, Whittaker, Stirling and Ohta*, 199 USPQ 137, 140 (CCPA 1978).

#### ***Allowable Subject Matter***

7. Claims 6, 7, 13 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references alone or in combination teach or suggest or

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motivate one of ordinary skill in the art to modify the processes recited in claims 1 and 8 by adding Cu base powder to the soft magnetic powder as recited in claims 6 and 12 nor heating the soft magnetic alloy powder in a reducing atmosphere to activate the surfaces of the soft magnetic powder before the surface oxidation step as recited in claims 7 and 13.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps